

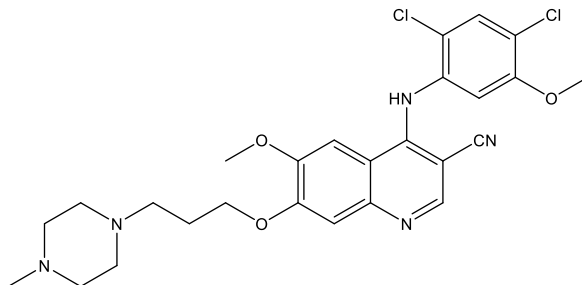
**Catalog # 10-2122**

**Bosutinib**

CAS 380843-75-4

4-[(2,4-Dichloro-5-methoxyphenyl)amino]-6-methoxy-7-[3-(4-methyl-1-piperazinyl)propoxy]-3-quinolinecarbonitrile; SKI-606

Lot# X102081



Bosutinib is an ATP-competitive dual Src/Abl kinase inhibitor ( $IC_{50} = 1 \text{ nM}$ ).<sup>1</sup> It potently inhibits the apoptosis-linked STE20 kinases but does not inhibit Kit or PDGFR.<sup>2</sup> Bosutinib was found to inhibit 16 of 18 imatinib-resistant mutant forms of Bcr-Abl expressed in murine myeloid cell lines, but did not inhibit T315I and V299L mutants.<sup>3</sup> Enhances retinoic acid-induced differentiation of HL-60 leukemia cells.<sup>4</sup> Suppresses migration and invasion of human breast cancer cells ( $IC_{50} = 250 \text{ nM}$  which is also the  $IC_{50}$  for inhibition of cellular Src kinase activity in intact tumor cells).<sup>5</sup>

- 1) Golas *et al.* (2003), *SKI-606, a 4-anilino-3-quinolinecarbonitrile dual inhibitor of Src and Abl kinases, is a potent antiproliferative agent against chronic myelogenous leukemia cells in culture and causes regression of K562 xenografts in nude mice*; *Cancer Res.*, **63** 375
- 2) Remsing Rix *et al.* (2009), *Global target profile of the kinase inhibitor bosutinib in primary chronic myeloid leukemia cells*; *Leukemia*, **23** 477
- 3) Redaelli *et al.* (2009), *Activity of bosutinib, Dasatinib, and nilotinib against 18 imatinib-resistant BCR/ABL mutants*; *J. Clin. Oncol.*, **27** 469
- 4) MacDonald *et al.* (2018), *Src family kinase inhibitor bosutinib enhances retinoic acid-induced differentiation of HL-60 leukemia cells*; *Leuk. Lymphoma*, **59** 2941
- 5) Vultur *et al.* (2008), *SKI-606 (bosutinib), a novel Src kinase inhibitor, suppresses migration and invasion of human breast cancer cells*; *Mol. Cancer Ther.*, **7** 1185

**PHYSICAL DATA**

Molecular Weight:	530.45
Molecular Formula:	C <sub>26</sub> H <sub>29</sub> Cl <sub>2</sub> N <sub>5</sub> O <sub>3</sub>
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (100 mg/ml) or Ethanol (up to 25 mg/ml with warming)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**